



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,806	04/09/2002	Anders Moberg	611-55	9565
23117	7590	01/03/2005		EXAMINER
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714				ALVO, MARC S
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/070,806	MOBERG ET AL
	Examiner Steve Alvo	Art Unit 1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 18 October 2004.

2a) This action is FINAL.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 14-33 is/are pending in the application.

4a) Of the above claim(s) 32 and 33 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 14-31 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 15, 17, 19-21 and 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over LINDAHL (4,776,926) with or without PROUGH (4,731,160).

LINDAHL teaches a primary refining in a disk refiner (column 4, lines 23-26) followed by screening (19) wherein the long fibers (20) having a freeness of 750 ml CSF (column 5, lines 61-63) are separated (19) from the primary fine fraction (24) and passed to a secondary refiner (column 5, lines 55-60). The primary fines are removed from the production of the mechanical pulp and the long fibers are used to make paperboard and cardboard products (column 6, lines 15-23) and the fine fibers are used to produce printing papers (column 5, lines 49-54). The fines of the instant process would obviously contain the same material, e.g. lamella fragments, parenchyma cells, lignin and extractives as they are produced in the same manner as the instant fines, e.g. primary refining followed by fractionation. If there is any difference with the fines of LINDAHL and the instant fines it would have been due to the amount of screening. PROUGH teaches screening after refining to separate the fines and teaches the fines would comprise 10-20% of the original feed. The amount of screening would depend upon the intended use of the fines. It would have been obvious to adjust the screening stage of LINDAHL to allow an accept portion (fines) of 10-20% of the original feed to produce a fine fiber product having the same properties as PROUGH. Claim 19 is rejected as LINDAHL teaches after the primary refining, which takes place prior to retention vessel (1); is subjected to mechanical agitation, retention,

temperature enhancement and dilution with hot process liquid (12) in vessel (11), see column 12, lines 36-38 and column 5, lines 1-11. See LINDAHL, column 5, lines 37-38 for a curved screen. Claim 27 is rejected as the bleaching stage (9) of LINDAHL is performed after primary refining and screening (3). This is also would have been obvious from the teachings of PROUGH wherein the refined and screened pulp is further bleached.

Claims 16, 18, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over LINDAHL (4,776,926) in view of PROUGH (4,731,160) as applied to claim 1 above.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over LINDAHL (4,776,926) with or without PROUGH (4,731,160) as applied to claim 1 above, with or without JONES et al (3,411,720) or KARNIS et al (4,292,122).

KARNIS et al or JONES et al teach substantially the same process as LINDAHL, e.g. primary refining, screening, secondary refining and teaches that the fractionating stage can comprise both screens and a centrifugal stage in a cyclone. LINDAHL teaches using a screening or a centrifuge fractionating stage (column 5, lines 37-38). It would have been obvious that the centrifugal separation of LINDAHL could be performed in a cyclone as taught by KARNIS et al or JONES et al. It would have been obvious to use both the centrifugal and screening stages of LINDAHL for more selective fine separation as taught by KARNIS et al or JONES et al. See JONES et al, Figure 4 for cyclone.

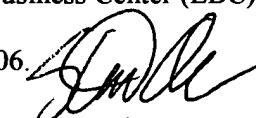
Applicant's arguments are moot due to the new art applied against the new claims. LINDAHL teaches the screening of the pulp between the primary and secondary refining stages.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). application or proceeding is assigned is 703-872-9306.



Steve Alvo  
Primary Examiner  
Art Unit 1731

msa